

David Jacobson

David Jacobson received a BS degree in 1989 in psychobiology from the U. of Michigan. He joined the MS program in biomedical



engineering at NJIT in 1990 where he focused on the biomechanics. While earning his masters degree, David worked at two different biomedical engineering companies, gaining hands-on biomedical engineering and

materials science experience. His thesis was "Wear and Friction of Titanium Nitride on Ultrahigh Molecular Weight Polyethylene Under Oscillating Motion for Evaluation of Use in Articulating Orthopedic Applications." He received his M.S. degree in 1992.

David obtained a law degree in 1995 from George Washington University. He has worked closely with engineers in diverse fields, including surgical devices and implants, telecommunications, sporting goods, textiles, commercial and consumer electronics, and computer software, among other technologies. Mr. Jacobson's legal experience has included work at the International Trade Commission.

Mr. Jacobson is licensed to practice law in New York and New Jersey as well as before the U.S. Patent and Trademark Office. He is a member of the New York Intellectual Property Law Association.

David Jacobson is a partner in the law firm of Gordon & Jacobson, P.C.

Prof. John Federici

N. Guzelsu¹, John Federici², H. C. Lim¹, H. Chaudhry¹, A. Ritter³ and T. Findley³,

"Measurement of Skin Stretch via Light Reflection", *J. Biomedical Optics*, **8**, 80 (2003).

1 - NJIT student; 2 - NJIT faculty member;

3 - UMDNJ faculty member

Pranay Uppuluri

Pranay Uppuluri graduated from Metuchen High School where he developed an interest in medicine.



He enrolled at NJIT with the hope of becoming a physician.

Prof. Kristol introduced him to research at the New Jersey Medical School where he studied "Coagulant Effects of Protamine Sulfate on Human Blood in Absence of Heparin," a paper

which he presented at the 29th Northeast Bioengineering Conference held at NJIT in March 2003.

Pranay has been accepted for Early Admission to NJ Medical School, while he is a junior at NJIT. He will be awarded a BS degree when he completes his first year at NJMS.

He has achieved a GPA of 4.0.

Pranay plays tennis and badminton, and enjoys movies.

Prof. Stanley Reisman Master Teacher



Professor Stanley Reisman has been awarded the title of "Master Teacher" at NJIT. Prof. Reisman joined the NJIT faculty in 1968 as a member of the Department of Electrical Engineering.

He created Simulation of Physiological Systems, one of the first biomedical engineering courses at NJIT, and was one of the founding members of the Biomedical Engineering Department where he created BME Electronics I and II, BME Signals and Systems, BME Computing, Medical Instrumentation and the Capstone Design course.

He has been consistently ranked by his students with a score of 3.5 or more ever since the student ratings of faculty was created.

He was the Conference Chair for two major IEEE student-oriented Northeast Bioengineering Conferences held at NJIT in 1993 and in 2003; both were the largest in their history.

Biomedical Engineering at NJIT

The New Jersey Institute of Technology

September 2003 #6

Bachelors Degree Masters Degree Doctoral Degree in Biomedical Engineering

For information, contact the NJIT Admissions Office (973) 596-3300

the Biomedical Engineering Department (973) 596-5476

Visit the Web Site www.njit.edu/bme

Cynthia Camacho

Why did you choose NJIT?

In high school, a representative from NJIT came to talk to us about the benefits of attending NJIT. I learned that NJIT had an excellent reputation as an engineering and research university, and was affordable and close to home. I decided to attend



NJIT in the fall of 1999. During my four years at NJIT, I have come to support the fact that NJIT is committed to helping students such as me to find internships and research opportunities on campus or in surrounding institutions. Moreover, the rigorous coursework in math, science, and

technology prepares NJIT students for the technology-driven economy that awaits them after they graduate. In 2002, I received a \$2,000 Research Experience for Undergraduates (REU) grant to carry out a research project under the guidance of Prof. Richard Foulds. I investigated the use of text-summarizing software to enhance the accessibility of large bodies of text for those whose reading skills are compromised by their disability. I presented the results at the 2002 Northeast Bioengineering Conference.

I was an intern at the Newark Beth Israel Medical Center where I rotated among Physical Therapy, Pathology, Cardiac, Catheterization Lab, and Pacemaker and the Defibrillator Evaluation Center. The six-week internship provided tuition assistance, paid internships, and bioethics seminars to students pursuing health-related careers.

My senior project consisted of the fabrication and design of a hydrogel composed of type I collagen designed for use as a three-dimensional cell culture medium. The hydrogel will be used to simulate an environment that cells are exposed to in the human body. Cells will be added to the hydrogel and analyzed for viability.

29th Northeast Bioengineering Conference - March 2003

The twenty-ninth Northeast Bioengineering Conference was held at NJIT in March. Among the 160 papers that were presented, thirty-seven were reports of research at NJIT. The following are some of the papers.

American Sign Language Finger Spelling Recognition System

Jerome Allen¹, Pierre Asselin¹, Richard Foulds²

Decreased Dynamics in the Adaptation Phase Signifies that Short Term Adaptation Exists in Convergence and Divergence Ocular Movements

Mayur Bhavsar¹, Tara Alvarez², John Semmlow³, Michael Bergen²

***In Vitro* Investigation of Streptokinase Activity Using Sonoclot Coagulation Analysis**

Biren Bhatt¹, Pranay Uppuluri¹, David Kristol², Rohit Arora⁴, Charles Spillert⁴

Insulin Stimulates Monocyte Membrane Associated Tissue Factor Activity

Biren Bhatt¹, Darshana Patel¹, David Kristol², Rohit Arora⁴, Charles Spillert⁴

Haptic Control of Functional Electrical Stimulation of the Lower Extremities

Corey Birmingham¹; Matthew Noesner¹, Richard Foulds²

The Dynamics of Convergence Insufficiency

Anuj Daftari¹, Tara Alvarez², Florence Chua¹, Robert DeMarco¹, Kenneth Ciuffreda³

Cardioventilatory Differences in Spinal Cord Injured Subjects During Peak Exercise Testing

Melissa DePrince¹, Stanley Reisman², Jill Wecht²

Detection and Analysis of Glucose at Metabolic Concentration Using Raman Spectroscopy

Aysegul Ergin¹, Michael Vilaboy¹, Alaine Tchouassi², Richard Greene², Gordon Thomas²

Introducing Vision Research and Biomedical Engineering to

Pre-college 8th Grade Girls

Sophy George¹, Tara Alvarez², Nicole Koppel⁶, Suzanne Berliner⁷

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Computational Modeling of Drug Delivery by Microvascular Networks

Daniel Goldman²

Preliminary Assessment of the Effectiveness of Enhanced External Counter Pulsation on Heart Rate Variability for Heart Failure Patients

Kripa Jayaraman¹, Stanley Reisman² and Anne Marie Petrock¹

The Effect of Copper Ions on Sedimentation Rates of Erythrocytes

Elias Jelis¹, David Kristol², Rohit Arora⁴, Charles Spillert⁴

Implementation of Cyclic Exercise Protocol in People Having AIDS

Ujawala Kalambur¹ and Stanley Reisman²

Pre-College Biomedical Engineering Program For Girls

Nicole Koppel⁷, Rosa Cano⁷, Suzanne Heyman⁷, and Tara Alvarez²

1 - NJIT student

2 - NJIT faculty member

3 - Rutgers University faculty member

4 - UMDNJ/NJ Medical School faculty member

5 - Bronx Veterans Administration Med Center

6 - Montclair University faculty member

7 - NJIT staff member